NOTICE OF APPEAL

TO: Mark Nechodom

Director of Conservation

DEPARTMENT OF CONSERVATION

STATE OF CALIFORNIA

801 K Street

Sacramento, CA 95814

Steven R. Bohlen

State Oil and Gas Supervisor

DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

801 K Street

Sacramento, CA 95814

BY: HATHAWAY, LLC

4205 Atlas Court

Bakersfield, CA 93308

SUBJECT: Emergency Order No. 1061;

Davies Realty Co. 9-3 (API no. 02949075);

Date of Service: July 22, 2014

Hathaway, LLC (Hathaway) hereby gives notice of appeal of Order No. 1061, issued by Steven R. Bohlen, State Oil and Gas Supervisor (Supervisor), and served on Hathaway July 22, 2014. Order No. 1061 requires Hathaway to immediately cease operation of "Davies Realty Co. 9-3" (API no. 02949075). This appeal is made to Mark Nechodom, Director of Conservation (Director), pursuant to Section 3350 of the Public Resources Code (PRC). Hathaway brings this appeal within ten (10) days of the date of service of the Order as required by PRC § 3350.

BACKGROUND

1. The "Davies Realty Co. 9-3" Injection Well

Hathaway operates a Class II water disposal well identified as "Davies Realty Co. 9-3" (API no. 02949075) ("Davies 9-3"). "Davies 9-3" is located within the administrative boundaries of the Kern Front Oil Field. "Davies 9-3" was originally completed as an oil production well in the Chanac Formation of the Kern Front Field on June 16, 1974. Although its location is outside the 1973 productive limits of the Chanac pool (as shown in the *California Oil & Gas Field Maps, Volume 1*), "Davies 9-3" was operated as an oil producer from 1974 until 1978, and had a cumulative oil production of 2,747 barrels.

"Davies 9-3" was abandoned by Chevron on June 8, 1989. Thereafter, Chevron assigned "Davies 9-3" to Hathaway following Hathaway's acquisition of the Davies Realty Lease. In September 2009, Hathaway submitted a Notice of Intent to re-work "Davies 9-3" to recomplete it as a water disposal well. Hathaway received a permit to rework "Davies 9-3" on April 26, 2010 from the Division's District 4 office. The target injection zone was the Chanac Formation. At that time, "Davies 9-3" was considered by the Division to be within the productive limits of the Kern Front Chanac pool, because it was within the productive limits as shown in the 2nd edition of the *California Oil & Gas Field Maps, Volume I*, published in 1991.

2. The "Davies Realty Co. 10-2BH" Production Well

Hathaway uses its "Davies 9-3" injection well for the sole purpose of disposing of produced water obtained from a nearby horizontal oil production well, identified as "Davies Realty Co. 10-2BH" (API no. 03051296) ("Davies 10-2BH"). "Davies 10-2BH" is also located within the administrative boundaries of the Kern Front Oil Field, and produces both hydrocarbons and water from the Chanac Formation. "Davies 10-2BH" has a surface location approximately one-quarter mile away from "Davies 9-3," but a downhole completion location of less than 500 feet from the downhole completion location of the "Davies 9-3" injector.

The quality of water produced by "Davies 10-2BH" is relatively fresh – concentrations of total dissolved solids (TDS) range from 280 ppm to 350 ppm. Hathaway separates the hydrocarbons from the produced water at a tank battery located in the field, and then uses "Davies 9-3" to re-inject some of the produced water back into the Chanac Formation.

3. Diversion of Produced Water to Concordia Ranch for Irrigation

In July 2014, Hathaway began diverting a portion of the water produced by "Davies 10-2BH" to Concordia Ranch for blending with groundwater to be used for irrigating citrus. The diversion was authorized pursuant to a Waiver of Waste Discharge Requirements adopted by the Central Valley Regional Water Quality Control Board on October 13, 2011. (Order No. R5-2011-0077 and R5-2011-0080.) The Regional Board reviewed laboratory analytic results for the water produced by "Davies 10-2BH," and determined that the proposed discharge (i.e., blending with groundwater pumped by Concordia Ranch for purposes of irrigation) was consistent with Basin Plan requirements. The Regional Board issued its waiver pursuant to a monitoring plan which requires annual sampling at the point of discharge into the pipeline that leads to the Concordia Ranch. Notably, this is also the discharge point for the pipeline to the "Davies 9-3" injector. The Regional Board found that beneficial reuse of the reclaimed wastewater could reduce the amount of groundwater pumped from the Concordia Ranch irrigation well by approximately 70 acre feet per year.

Given constraints on the water conveyance facilities, Hathaway is able to deliver only a portion of the roughly 2,500 barrels a day of water produced by "Davies 10-2BH" to Concordia Ranch. As such, the balance of the produced water must be re-injected into the formation via "Davies 9-3," if production from "Davies 10-2BH" is to continue. The produced water Hathaway injects is the same source water the Regional Board previously approved for blending with groundwater consistent with Basin Plan requirements. Hathaway does not use "Davies 9-3" for any purpose other than to re-inject Chanac Formation water back into the Chanac for disposal.

4. Hathaway's Fresh Water Well

Hathaway has a fresh water source well located on the Davies Realty Lease. The well is completed to a depth of 1,000 feet, in the Kern River Formation, above the basal Etchegoin and the hydrocarbon-bearing Chanac Formations. The static water level in the well is at a depth of 840 feet. Since the "Davies 9-3" injection zone is the Chanac, the perforations in "Davies 9-3" are from 1,740 feet to 1,750 feet. Therefore, there is at least 140 feet of separation, provided by the basal Etchegoin Formation, between the fresh water sources found in the Kern River Formation and the waters of the Chanac Formation in the area of "Davies 9-3." Hathaway uses this fresh water source exclusively for its oil and gas operations. There are no other known fresh water wells located within a 3.9 mile radius of the Davies Realty Lease.

5. Order No. 1061

Order No. 1061 (attached hereto as "Exhibit A") was issued on July 22, 2014. It required Hathaway to immediately cease all injection operations into "Davies 9-3" by noon on Friday, July 25, 2014. Despite a lack of evidence to support the finding, Order No. 1061 was issued on the ground that injection into "Davies 9-3" poses a danger to life, health, property and natural resources. In actuality, Order No. 1061 was issued on the ground that "Davies 9-3" injects into a portion of the Chanac Formation that has not yet been designated "exempt" for purposes of UIC injection by the U.S. Environmental Protection Agency (USEPA). Quoting from Order No. 1061:

"Pursuant to Title 40, Code of Federal Regulations, section 146.4, and other authorities, only properly designated aquifers may receive injected fluids in connection with underground injection operations [page 3, line 4-6].... [C]ertain underground aquifers within the State . . . [have been] designated as 'exempted aquifers.' (40 CFR, § 146.3.) This designation qualifies such aquifers as appropriate for the injection of fluids attendant to or produced by oil and gas extraction activities and depends upon, among other things, the presence of sufficient hydrocarbons and sufficient number of parts per million (ppm) of total dissolved solids (TDS) in the receiving aquifer. (40 CFR, section 146.4) [Page 3, lines 22-25]... The Division has become aware that certain underground injection

activities are occurring into non-exempt aquifers [page 4, lines 1-2].... Based on information and belief, the Division has determined that the well subject to this order is injecting into one or more non-exempt aquifers [page 4, lines 3-4].... [T]he Supervisor has determined that an emergency exists and that immediate action(s) are necessary to protect life, health, property and natural resources, specifically, the further degradation of the affected aquifers [page 4, lines 18-20]...."

6. Hathaway's Compliance

On July 25, 2014, in compliance with the requirements of Order No. 1061, Hathaway shut-in operation of its "Davies 9-3" injection well. For practical reasons, the shut-in also forced Hathaway to shut-in operation of its "Davies 10-2BH" production well. The "Davies 10-2BH" well had to be shut-in because Hathaway lacks a viable disposal alternative for the Chanac water produced by "Davies 10-2BH." Thus, not only has Hathaway lost production, Concordia Ranch has lost a valuable source of high quality irrigation water.

7. Hathaway's Aquifer Exemption Request

Since June of 2013, Hathaway and its agents have been working with UIC personnel in the Division's District 4 office to obtain an aquifer exemption for the Chanac Formation covering Hathaway's lease at Kern Front. In the aquifer exemption submittal, Hathaway requests that the boundaries of the 1973 productive limits be expanded to include areas with current and historic hydrocarbon production. The submittal was made pursuant to 40 CFR § 146.4, on grounds the Chanac Formation in the area where injection is occurring is not currently being used as a source of drinking water, nor can it reasonably be expected to serve as a source of drinking water in the future, due to the presence of hydrocarbons in commercially producible quantities. Notably, large portions of the Kern Front Etchegoin and Chanac Formations have previously been "exempted" by EPA on identical grounds, and the additional area covered by Hathaway's exemption request represents a logical extension of the exempted zone.

Hathaway's first aquifer exemption submittal was made in August of 2013. In the intervening months, UIC personnel replied to the aquifer exemption application with comments, which were addressed in subsequent submittals of December 2013, January 2014, and June 2014.

8. No Degradation of Chanac Formation Water Is Occurring As a Result of Hathaway's Injection Operation

Hathaway's aquifer exemption request includes substantial evidence demonstrating both the high quality nature of the source water that exists in the Chanac Formation, as well as the high quality nature of the produced water that Hathaway re-injects back into the Chanac via "Davies 9-3." In sum, Hathaway re-worked an oil production well that was formerly producing from the Chanac to make it a water injection well for purposes of returning high quality produced water to the Chanac. Hathaway does not use "Davies 9-3" for any purpose other than to re-inject Chanac Formation water produced by "Davies 10-2BH" back into the Chanac.

The evidentiary record in this case negates the conclusion drawn by the Supervisor in Order No. 1061, namely that operation of "Davies 9-3" poses a danger to life, health, property and natural resources. The record instead supports the opposite conclusion that no degradation of Chanac Formation water is occurring as a result of Hathaway's "Davies 9-3" injection operation.

GROUNDS FOR APPEAL

The grounds for the appeal include the following:

- (1) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that injection is causing damage to life, health, property or natural resources;
- (2) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that injection is causing the infiltration of, or the addition of, detrimental substances into underground or surface water suitable for irrigation or domestic purposes;
- (3) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that injection is causing degradation of Chanac Formation receiving water quality;
- (4) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that an emergency situation exists justifying the issuance of a cease and desist order pursuant to PRC § 3226;
- (5) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that injection is causing a deleterious effect on receiving water quality in violation of State Water Resources Control Board Resolution No. 88-63 (Source of Drinking Water Policy) or Resolution No. 68-16 (Antidegradation Policy);
- (6) Order No. 1061 is not supported by competent geologic, engineering, or water quality evidence demonstrating that injection is "endangering" underground sources of drinking water in violation of the requirements of

SDWA § 1421(d)(2) (42 U.S.C. § 300h (d)(2)), i.e., non-compliance of Chanac Formation receiving water with any national primary drinking water regulation, or that injection could otherwise adversely affect the health of persons.

- (7) Order No. 1061 ignores substantial evidence submitted to the Division by Hathaway that the produced water being disposed of via "Davies 9-3" is of the same quality as the receiving water quality in the injection zone, because it is being produced from and then re-injected back into the Chanac Formation a distance of less than 500 feet away;
- (8) Order No. 1061 ignores substantial evidence submitted to the Division by Hathaway that the Chanac Formation in the area where injection occurs qualifies as an "exempt aquifer" pursuant to 40 CFR § 146.4, because it is not currently being used as a source of drinking water supply, nor is it likely to be used as a source of drinking water in the future, due to the presence of hydrocarbons in commercially producible quantities;
- (9) Order No. 1061 ignores the authority vested in the Division pursuant to the Public Resources Code and its primacy approval under SDWA § 1425 to apply the criteria set forth in 40 CFR § 146.4 and authorize injection into non-exempt areas that are logical extensions of previously exempted aquifers, provided operators submit and pursue aquifer exemption requests through USEPA;
- (10) Order No. 1061 contravenes the express statutory requirement of SDWA § 1421(b)(2)(A) (42 U.S.C. § 300h (b)(2)(A)), which prohibits regulations that that unnecessarily interfere with or impede the underground injection of brine or other fluids brought to the surface in connection with oil or natural gas production;
- (11) Order No. 1061 arbitrarily and unreasonably interferes with and impairs Hathaway's fundamental vested right to produce hydrocarbons from the Chanac Formation.

For the foregoing reasons, Order No. 1061 was issued without or in excess of the Supervisor's jurisdiction, constitutes a prejudicial abuse of discretion, and is not appropriately tailored to fulfill the Supervisor's dual statutory mandate under PRC § 3106(a) and (b).

HEARING REQUEST

Pursuant to PRC §§ 3351 and 3352, Hathaway requests that within ten (10) days of the date hereof, a hearing be scheduled on the appeal. Hathaway requests that, pursuant to PRC § 3352, the hearing date be set such that it provides Hathaway at least twenty (20) days advance notice in writing of the time and place of the hearing. Hathaway further requests that, pursuant to PRC § 3352, Hathaway be given the opportunity to submit a Memorandum of Points and Authorities and additional evidence in support of this appeal at least ten (10) days prior to the hearing. Finally, Hathaway requests the right to present additional evidence at the hearing in support of this appeal, and also the right to modify the remedy requested below in response to future developments.

REMEDY REQUESTED

Hathaway requests that the Director set aside Order No. 1061 or, if appropriate, issue a new order modifying Order No. 1061 to authorize continued operation of the "Davies 9-3" injection well pursuant to conditions which will ensure to the satisfaction of the Division that no damage occurs to life, health, property and natural resources.

INTERIM RELIEF REQUESTED

Order No. 1061 requires Hathaway to submit a technical report with an analysis of a representative sample of the fluid being injected into "Davies 9-3." (See Paragraph 19(c).) Exhibit B identifies the suite of constituents that must be analyzed. The technical report must be submitted to the Supervisor by August 21, 2014 (within 30 days of July 22, 2014). The submittal deadline is prior to the likely hearing date that will be set for the appeal.

Hathaway presently lacks the ability to comply with the technical report requirement. In order to obtain the required fluid sample, Hathaway will need to resume production from "Davies 10-2BH." This in turn will necessitate written authorization from the Supervisor to temporarily resume injection operations into "Davies 9-3." As indicated previously, "Davies 10-2BH" had to be shut-in because, without the "Davies 9-3" injector on-line, Hathaway lacks a viable disposal alternative for the produced water. "Davies 10-2BH" produces more water than Hathaway can physically deliver to Concordia Ranch, and the balance must be re-injected into the formation via "Davies 9-3."

Hathaway requests that the Supervisor issue an interim order temporarily suspending the August 21st deadline for submittal of the technical report required pursuant to PRC § 3236. A similar request will be made to the Central Valley Regional Water Quality Control Board to suspend the August 22nd and 29th deadlines for submittal of a technical report and related analyses to the Regional Board pursuant to Water Code § 13267.

Hathaway requests that these deadlines be suspended pending a decision by the Director following the hearing on the appeal.

In the meantime, Hathaway will submit to the Supervisor representative samples of the fluid injectate which, as recently as June 3, 2014, was analyzed for the suite of constituents required by the monitoring plan imposed by the Central Valley Regional Board as a condition for beneficial reuse of the produced water (Order No. R5-2011-0077). Per monitoring plan requirements, the sample was taken at a location downstream of the battery tank which separates the oil and water produced by "Davies 10-2BH" at the point of discharge into the pipelines that lead to Concordia Ranch and the "Davies 9-3" injector respectively. Hathaway has been sampling at this location periodically since 2009, and will provide the Supervisor with each of the available analytical reports.

The list of constituents analyzed pursuant to the Regional Board's approved monitoring plan (Order No. R5-2011-0080) is not as expansive as the list of constituents required to be analyzed by the Supervisor's Order No. 1061, nor the Regional Board's Water Code § 13267 order. Nevertheless, the available sampling results should be adequate to inform the Director regarding the quality of fluid injectate for purposes of the appeal.

The alternative is for the Supervisor to issue immediate written authorization for Hathaway to temporarily resume injection operations into "Davies 9-3," so that "Davies 10-2BH" can be brought back on-line. Absent such written authorization, Hathaway lacks the ability to collect new fluid samples and have them analyzed for the full suite of constituents required by Order No. 1061.

Dated: July 31, 2014

Respectfully submitted,

HOLLISTER & BRACE, P.C. 1126 Santa Barbara Street Santa Barbara, CA 93101

Tele: 805.963.6711 Fax: 805.965.2905

By: Peter L. Candy, pcandy@hbsb.com

Attorney for Hathaway, LLC

¹ Past analytical reports for "Davies 9-3" injectate, excluding the most recent dated June 3, 2014, have been submitted to the Division's District 4 office as ongoing supplements to Hathaway's aquifer exemption request.

| 1 | Steven R. Bohlen, State Oil and Gas Supervisor |
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| 2 | Department Of Conservation |
| 3 | Division of Oil, Gas, and Geothermal Resources 801 K Street |
| 4 | Sacramento, CA 95814-3500 |
| 5 | Telephone (916) 323-6733 Facsimile (916) 445-9916 |
| 6 | 1 acsimile (910) 443-9910 |
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| 8 | • |
| 9 | STATE OF CALIFORNIA |
| 10 | NATURAL RESOURCES AGENCY |
| 11 | DEPARTMENT OF CONSERVATION |
| 12 | DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES |
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| 15 | EMERGENCY ORDER TO |
| 16 | IMMEDIATELY CEASE INJECTION OPERATIONS |
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| 19 | NO. 1061 |
| 20 | Tuesday, July 22, 2014 |
| 21 | Operator: Hathaway LLC |
| 22 | Well: API No. 02949075 |
| 23 | |
| 24 | BY |
| 25 | Steven R. Bohlen |
| 26 | STATE OIL AND GAS SUPERVISOR |
| 27 | |

INTRODUCTION

- 1. The Division of Oil, Gas, and Geothermal Resources (Division) has determined that an emergency exists in connection with underground injection operations for the well operated by Hathaway, LLC, identified as API no. 02949075 (hereinafter "the well subject to this order"). Injection into this well poses danger to life, health, property, and natural resources. Therefore, under the authority of Public Resources Code sections 3106, 3222, 3224, 3225, 3226, and 3235, and California Code of Regulations, title 14, sections 1724.6, 1724.7, 1724.10, the State Oil and Gas Supervisor (Supervisor) is ordering that injection into the well subject to this order immediately cease as specified below. The Division is working cooperatively with the Central Valley Regional Water Quality Control Board, (which is contemporaneously issuing its own order pursuant to California Water Code section 13267), and the State Water Resources Control Board to obtain information for use in evaluating, preserving and protecting underground water suitable for irrigation or domestic purposes.
- 2. This order constitutes written notice from the Division to immediately stop injection in the well subject to this order, pursuant to California Code of Regulations, title 14, section 1724.10, subdivision (h).

STATUTORY and RELATED AUTHORITY

- 3. Pursuant to Public Resources Code section 3106, the Supervisor shall supervise the operation of wells in this State so as to prevent, as far as possible, damage to life, health, property, and natural resources, and to prevent damage to underground waters suitable for irrigation and domestic purposes by the infiltration of, or the addition of, detrimental substances.
- 4. Pursuant to Public Resources Code sections 3222, 3224, 3225, 3226, 3235, and other authorities, the Supervisor has a duty to, and may take action to, prevent the infiltration of detrimental substances into underground water potentially suitable for irrigation or domestic purposes. Pursuant to these statutes and authorities, the Supervisor may order tests to be performed, remedial action(s) to be taken, and the preparation of reports regarding such tests and/or remedial action(s).

- 5. Pursuant to Title 14, California Code of Regulations, sections 1724.6, 1724.7, 1724.10, and other authorities, the Division possesses authority to approve and evaluate Underground Injection and Disposal projects, and to require that data be submitted in connection therewith.
- 6. Pursuant to Title 40, Code of Federal Regulations, section 146.4, and other authorities, only properly designated aquifers may receive injected fluids in connection with underground injection operations.
- 7. Pursuant to Title 14, California Code of Regulations, section 1724.10, subdivision (h), underground injection operations shall be stopped upon written notice from the Division.

FACTS

- 8. The well subject to this order is under the permitting authority of the Supervisor and/or Division pursuant to Public Resources Code section 3106, and Title 14, California Code of Regulations section 1724.6.
- 9. Such permitting authority is also contemplated by the federal Safe Drinking Water Act and its implementing regulations. Effective March 14, 1983, California's Division of Oil, Gas and Geothermal Resources (Division) was granted primacy by the United States Environmental Protection Agency (US EPA) to carry out the terms of an Underground Injection Control Program, pursuant to section 1425 of the Safe Drinking Water Act (codified at 42 U.S.C. § 300f et seq.). (48 Fed. Register 6336, Feb. 11, 1983.)
- 10. Contemporaneously with the granting of primacy to the Division, and on occasion thereafter, certain underground aquifers within the State were designated as "exempted aquifers." (40 CFR, § 146.3.) This designation qualifies such aquifers as appropriate for the injection of fluids attendant to or produced by oil and gas extraction activities and depends upon, among other things, the presence of sufficient hydrocarbons and sufficient number of parts per million (ppm) of total dissolved solids (TDS) in the receiving aquifer. (40 CFR, section 146.4.)
- 11. As a result of the granting of primacy, the Division, pursuant to Title 14, California Code of Regulations sections 1724.6, 1724.7, and 1724.10, must approve any subsurface injection or disposal activities based on pertinent and necessary data submitted to the Division.

- 12. The Division has become aware that certain underground injection activities are occurring into non-exempted aquifers.
- 13. Based on information and belief, the Division has determined that the well subject to this order is injecting into one or more non-exempt aquifers which:
 - (a) May contain underground water suitable for irrigation or domestic purposes;
 - (b) May contain water with less than 3,000 ppm total dissolved solids;
- (c) May have been specifically denied exempted aquifer status by the US EPA in connection with the Division's application for primacy;
 - (d) May not have been hydrocarbon-bearing at the time injection commenced; and
 - (e) May be a potential underground source of drinking water.
- 14. In order to prevent the infiltration of detrimental substances into underground water suitable for irrigation or domestic purposes, the Supervisor relies on the above-referenced legal authorities and factual allegations, and makes the orders set forth below.

ORDERS

15. Based on the facts, circumstances, and authorities described herein, on information and belief, and pursuant to the Supervisor's duties set forth in Public Resources Codes section 3106, pursuant to Public Resources Code section 3222, 3224, 3225, 3226, and 3235 the Supervisor has determined that an emergency exists and that immediate action(s) are necessary to protect life, health, property, and natural resources, specifically, the further degradation of the affected aquifers, and orders as follows:

I. Cease and Desist Injection Operations

16. The operator subject to this order will cease all injection operations into the well subject to this order on or before 12:00 Noon on Friday, July 25, 2014 unless the operator subject to this order provides the Division with documentary evidence generated by the United States Environmental Protection Agency, satisfactory to the Supervisor, specifically establishing that the aquifer(s) affected by the wells subject to this order are "exempted aquifers" as defined in Title 40, Code of Federal Regulations, sections 146.3, consistent with Title 40, Code of Federal Regulations section 144.1,

subdivisions (e)-(g), and the Safe Drinking Water Act. In the event the operator subject to this order makes such a submission of evidence, the operator will nevertheless cease any and all injection operations into the wells subject to this order on or before 12:00 Noon on Friday, July 25, 2014 unless the Supervisor notifies the operator in writing (1) that the documentary evidence provided is sufficient to establish that the aquifer receiving injection is an exempted aquifer under the authorities stated above, and (2) that resumption of injection is approved on that basis.

II. Alternative Disposal or Injection

17. In the event that production activities relying on the use of any well subject to this order are continued using an alternative method of disposal of fluid, or an alternative location of underground injection, such alternative disposal or injection method or location shall be utilized only pursuant to, as applicable, (a) any applicable waste discharge requirements or NPDES permit issued by the Central Valley Regional Water Quality Control Board; (b) an existing permit for Underground Injection into an "exempted aquifer" consistent with Title 40, Code of Federal Regulations, section 146.3, updated to reflect the addition of the new injectate as required by Title 14 of the California Code of Regulations, section 1724.10, subdivision (d); or (c) other means carried out in full compliance with any required laws or regulations.

III. Written Approval Required

18. Injection operations shall not resume into the well subject to this order except on the express written approval of the Supervisor.

IV. Provide Information

- 19. The operator subject to this order will provide the following information to the State Oil and Gas Supervisor, in compliance with the truthful and accurate reporting requirement of Public Resources Code section 3236, within 30 days of the date of this order:
- (a) For each well subject to this order, any and all information compiled or maintained, whether or not previously submitted to the Division, in compliance with Title 14, California Code of

Regulations, section 1724.7. The information submitted in response to this aspect of this order shall include, but not be limited to, the categories of information listed in Exhibit A attached hereto;

- (b) For each well subject to this order, the total volume of injected fluid for each month of operation, for all years of operation, any periodic chemical analyses of the fluid(s) being injected, and any amendments to the original project approval, as provided by Division reporting requirements;
- (c) For each well subject to this order, a technical report with an analysis of a representative sample of the fluid being injected, in accordance with the water quality analysis and reporting requirements contained in Exhibit B to this order;
- (d) For each well subject to this order, any and all data maintained in compliance with Title 14, California Code of Regulations, section 1724.10, subd. (h);
- (e) For each well subject to this order, the dates of, and documentation associated with, each mechanical integrity test undertaken to comply with Title 14, California Code of Regulations, section 1724.10, subd. (j);
- (f) For each well subject to this order, please also send copies of all of the data required in items (a) through (e) above to Central Valley Water Board, Attn. Dane Johnson, 1685 E Street, Fresno, CA 93706

Operator's Appeal Rights

20. This order may be appealed by filing a written statement with the State Oil and Gas Supervisor or district deputy that the order is not acceptable within ten (10) days of service of the order. This is an emergency order issued pursuant to Public Resources Code section 3226 and therefore, pursuant to Public Resources Code section 3350, subdivision (b), the filing of an appeal of this emergency order shall not operate as a stay of the order.

DATE July 22, 2014

Steven R. Bohlen

State Oil and Gas Supervisor

By

Exhibit A

Paragraph 19(a) of this order requires submission of the categories of information listed below. Specifically, your submission will include the following in spreadsheet form, labeled with the capital letters indicated, with attachments containing the backup documentation indicated in items Q through S, inclusive:

- A. The name of the owner and/or operator of the injection well;
- B. American Petroleum Institute (API) number for the injection well;
- C. Injection well name and number;

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- D. Name of the field in which the well is located;
- E. County in which the well is located;
- F. Latitude and Longitude (decimal degrees) of well head location;
- G. Latitude and Longitude Datum, indicate "1" for North American Datum of 1983 or "2" for North American Datum of 1927;
- H. Injection well total depth (feet);
- I. Top injection depth (feet);
- J. Formation/Zone name at top injection depth;
- K. Bottom injection depth (feet);
- L. Formation/Zone name at bottom injection depth;
- M. Date injection started in the well (Day/Month/Year, xx/xx/xxxx);
- N. Identify and describe all sources of fluid injected into the well;
- O. Injection volume in barrels for the period from 1 June 2013 through 31 May 2014;
- P. Total injection volume in barrels from the date injection in the well began through 31 May 2014;
- Q. Attach well construction diagram including all perforations, annular material, and seals;
- R. Attach copies of all available water quality lab analyses and/or reports of the injected fluids;
- S. Attach a calculation of the average water quality of injected fluid from the date injection began through 31 May 2014;

Exhibit B

Paragraph 19(c) of this order requires a technical report with an analysis of a representative sample of the fluid being injected into the well subject to this order. Such sampling and reporting will reflect the following:

Sampling

Injection fluid samples shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program, using current applicable EPA-approved analytical methods for water for the following:

- A. Total dissolved solids
- B. Metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A)
- C. Benzene, toluene, ethylbenzene, and xylenes
- D. Total petroleum hydrocarbons for crude oil
- E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene)
- F. Radionuclides listed under California Code of Regulations, title 22, Table 64442
- G. Methane

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- H. Major and minor cations (including sodium, potassium, magnesium, and calcium)
- I. Major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide)
- J. Trace elements (including lithium, strontium, boron, iron, and manganese)

Water Quality Reporting

Water quality information shall be submitted in a technical report that includes, at a minimum:

- A. Site plan with location(s) of representative sample(s).
- B. Description of field sampling procedures.
- C. Table(s) of analytical results organized by well number (including API number).
- D. Copies of analytical laboratory reports, including quality assurance/quality control procedures and analytical test methods.
- E. Waste management and disposal procedures.





Central Valley Regional Water Quality Control Board

23 July 2014

Chad J. Hathaway Hathaway LLC 4205 Atlas Court Bakersfield, CA 93308 PERSONAL SERVICE AND CERTIFIED MAIL 7013 2250 0002 0464 4611

ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267. You are legally obligated to respond to this Order. Read this Order carefully.

Hathaway LLC, is the operator of the injection well identified as API number 02949075 (hereinafter "injection well subject to this Order"). The California Division of Oil, Gas, and Geothermal Resources (Division) has determined that the injection well subject to this Order has been injecting fluids produced by oil or gas extraction activities into aquifers that may not have been properly designated as exempt aquifers under the federal Safe Drinking Water Act (42 U.S.C. § 300f et seq.). These aquifers may be suitable for drinking water supply and other beneficial uses. The Division is issuing an Emergency Order to Immediately Cease Injection Operations (Emergency Order) to Hathaway LLC, for the injection well subject to this Order concurrently with the issuance of this Order by the Central Valley Regional Water Quality Control Board (Central Valley Water Board).

This Order is intended to complement the Division's Emergency Order. As described further below, this Order requires Hathaway LLC, to submit information about the quality of groundwater within the zone(s) where fluids have been injected using the injection well subject to this Order. In addition, this Order requires Hathaway LLC, to submit the location and contact information for all water supply wells within one (1) mile of the injection well subject to this Order. The Division's Emergency Order requires Hathaway LLC, to submit other information that is also needed to assess the threat to groundwater quality posed by the operation of the injection well subject to this Order. The Division's Emergency Order requires Hathaway LLC, to submit that information to the Division and to the Central Valley Water Board. This Order is not intended to require Hathaway LLC, to submit any information that the Division's Emergency Order also requires Hathaway LLC, to submit.

The Central Valley Water Board's authority to require technical reports derives from Section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional board ... in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The Central Valley Water Board is concerned about the potential threat to human health and potential impacts to water quality posed by the discharge of waste associated with the injection of fluids into aquifers that were not properly designated as exempt aquifers under the federal Safe Drinking Water Act and that may be suitable for drinking water supply and other beneficial uses. The technical information and reports required by this Order are necessary to assess the potential threat to human health and potential impacts to water quality. The need to understand the potential threat to human health and potential impacts to water quality justifies the need for the information and reports required by this Order. Based on the nature and possible consequences of the discharges of waste, the burden of providing the required information, including reporting costs, bears a reasonable relationship to the need for the report, and the benefits to be obtained. Hathaway LLC, is required to submit this information and reports because it is the operator of the injection well subject to this Order.

Under the authority of California Water Code section 13267, the Central Valley Water Board hereby orders Hathaway, LLC, to:

By 31 July 2014, submit a work plan that adequately describes the procedures to collect a
representative groundwater sample from the injection zone(s) for the injection well subject to
this Order. By 22 August 2014, submit a technical report with the analyses of each of the
groundwater samples, in accordance with the water quality analysis and reporting
requirements contained in Attachment A to this Order.

Note: If a representative sample cannot feasibly be collected from one or more of the injection zones for the injection well subject to this Order within the required timeframe (e.g., due to constraints posed by the design of the injection well), then **by 8 August 2014**, submit a technical report demonstrating that collection of a representative sample from those injection zones is not feasible within the required timeframe, and proposing an alternative sampling procedure and expeditious time schedule for obtaining a representative sample of groundwater from those injection zones. Alternative sampling procedures and time schedules are subject to approval by the Assistant Executive Officer of the Central Valley Water Board.

- By 29 August 2014, submit all previously-obtained analytical data for fluid samples
 collected from any injection zones within one (1) mile of the injection well subject to this
 Order.
- 3. By 29 August 2014, submit a technical report containing the following:
 - A. A list and location map of all water supply wells within one mile of the injection well subject to this Order.
 - B. All available information for each identified water supply well, including the well owner name and contact information; type of well (i.e., domestic, irrigation, industrial, etc.); status (i.e., active, idle, etc.); well construction; borehole geophysical logs; and all analytical results for any water sample(s) collected from each water supply well. Notify Central Valley Water Board staff within 24 hours upon determination that any water supply well information cannot be obtained from the California Department of Water Resources because it is confidential.

Submissions pursuant to this Order must include the following statement signed by an authorized representative of Hathaway LLC:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The failure to furnish the required report, or the submission of a substantially incomplete report or false information, is a misdemeanor, and may result in additional enforcement actions, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Any person aggrieved by this Order of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations, and instructions applicable to filing petitions, may be found at http://www.waterboards.ca.gov/public notices/petitions/water quality/index.shtml, or will be provided upon request.

By **30 July 2014**, you must contact Dane S. Johnson of this office at (559) 445-5525 to discuss your proposed work plan and technical report.

All required technical information must be submitted to the attention of:

Dane S. Johnson Central Valley Water Board 1685 E Street Fresno, CA 93706

In addition, all information is to be copied to the Division, to the attention of:

Steven R. Bohlen, State Oil and Gas Supervisor Department of Conservation, DOGGR 801 K Street Sacramento, CA 95814-3500

Based on the information submitted in the work plan and/or technical report, additional information or action may be required.

Be advised that sections 13260 and 13264 of the California Water Code require any person who proposes to discharge waste that could affect waters of the state to submit a Report of Waste Discharge for any new discharge or change in the character, volume, or location of an existing discharge. Fluids produced by oil or gas extraction activities that can no longer be disposed of in the injection well subject to this Order cannot be discharged to land or waters of the state prior to the issuance of Waste Discharge Requirements, and cannot be discharged to waters of the United States prior to the issuance of an National Pollutant Discharge Elimination System (NPDES) Permit. Failure to comply with these requirements may constitute a misdemeanor under Water Code section 13265 or a felony under Water Code section 13387, and may also subject Hathaway LLC, to judicial or administrative civil liabilities. It is strongly recommended that you contact Central Valley Water Board staff to discuss any proposed changes to the discharge of the fluids that had previously been disposed of in an injection well subject to this Order.

Any questions regarding this matter should be directed to me at (559) 445-5116 or at Clay Rodgers@waterboards.ca.gov.

Clay L. Rodgers

Assistant Executive Officer

Clay I. Radgers

Enclosure: Attachment A

ATTACHMENT A

Water Quality Analysis

Groundwater samples collected from wells and injection zones shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program, using current applicable EPA-approved analytical methods for water for the following:

- A. Total dissolved solids
- B. Metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A)
- C. Benzene, toluene, ethylbenzene, and xylenes
- D. Total petroleum hydrocarbons for crude oil
- E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene)
- F. Radionuclides listed under California Code of Regulations, title 22, Table 64442
- G. Methane
- H. Major and minor cations (including sodium, potassium, magnesium, and calcium)
- I. Major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide)
- J. Trace elements (including lithium, strontium, boron, iron, and manganese)

Water Quality Reporting

Water quality information shall be submitted in a technical report that includes, at a minimum:

- Site plan with locations of well(s) sampled.
- B. Description of field sampling procedures.
- C. Table(s) of analytical results organized by well number (including API number).
- D. Copies of analytical laboratory reports, including quality assurance/quality control procedures and analytical test methods.
- E. Waste management and disposal procedures.